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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
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NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
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NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	JAN 11	CA/CAPLUS - Expanded patent coverage to include Russia (Federal Institute of Industrial Property)
NEWS EXPRESS			JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
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NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 07:35:05 ON 24 JAN 2005

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 07:35:17 ON 24 JAN 2005
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FILE COVERS 1907 - 24 Jan 2005 VOL 142 ISS 5
 FILE LAST UPDATED: 23 Jan 2005 (20050123/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> reactor
      389533 REACTOR
      231356 REACTORS
L1    436322 REACTOR
      (REACTOR OR REACTORS)
```

```
=> preheat?
L2    45882 PREHEAT?
```

```
=> l1(l)L2
L3    3537 L1(L)L2
```

```
=> ACRYLIC ACID
      240719 ACRYLIC
      1274 ACRYLICS
      241085 ACRYLIC
      (ACRYLIC OR ACRYLICS)
      3927157 ACID
      1461249 ACIDS
      4401144 ACID
      (ACID OR ACIDS)
L4    105288 ACRYLIC ACID
      (ACRYLIC(W)ACID)
```

```
=> l3n and l4
      9 L3N
L5    0 L3N AND L4
```

```
=> l3 and l4
L6    24 L3 AND L4
```

```
=> d l6 14-24 ti
```

```
L6    ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI    Catalytic oxidation of olefins
```

```
L6    ANSWER 15 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI    Catalysts for preparation of unsaturated acids and aldehydes
```

L6 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Unsaturated aldehydes and nitriles

L6 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Hydrocoumarin and coumarin flavorings and odorants

L6 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Catalyst for oxidation of olefins to unsaturated aldehydes or carboxylic acids

L6 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Oxidation of lower aliphatic aldehydes

L6 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Oxidation of propylene

L6 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Oxidation of α,β -unsaturated aldehydes in the presence of a catalyst containing vanadium, phosphorus, manganese, and oxygen

L6 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Catalytic polymerization of acetylenes and polyenes

L6 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Acrylonitrile and **acrylic acid** from propylene

L6 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Methacrylic acid and its esters

=> nitrogen

563853 NITROGEN
 3495 NITROGENS
 L7 566296 NITROGEN
 (NITROGEN OR NITROGENS)

=> l6 and l7

L8 2 L6 AND L7

=> d l8 1-2 ti fbib abs

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Safe and rapidly practicable cleaning procedure for catalysts and reactor materials used in gas-phase oxidation process in the synthesis of (meth) **acrylic acid**

AN 2003:548783 CAPLUS
 DN 139:101561
 TI Safe and rapidly practicable cleaning procedure for catalysts and reactor materials used in gas-phase oxidation process in the synthesis of (meth) **acrylic acid**

IN Hammon, Ulrich; Schroeder, Juergen
 PA BASF AG, Germany
 SO Ger. Offen., 4 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	DE 10217325	A1	20030717	DE 2002-10217325	20020418
				DE 2002-10217325	20020418
AB	A safe and rapidly practicable procedure for a renewed preheating and/or after-cooling of a reaction zone used in a catalytic gas-phase oxidation process used in the synthesis of (meth)acrolein and/or (meth)				

acrylic acid, especially avoiding a damage of catalyst and reactor material, may be carried out, if the oxygen content of the gas stream used amts. maximally 9 weight%, preferably ≤ 5 weight%, whereby the gas stream may be the circulating gas, optionally mixed with air.

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

TI Acrylonitrile and acrylic acid from propylene

AN 1964:425012 CAPLUS

DN 61:25012

OREF 61:4228h,4229a

TI Acrylonitrile and acrylic acid from propylene

IN Foster, Robert E.

PA E. I. du Pont de Nemours & Co.

SO 4 pp.

DT Patent

LA Unavailable

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3118927		19640121	US	19591029

PI US 3118927
AB The problem of temperature control and localized concentration of gaseous reactants in

exothermic, fixed-bed catalytic gas-phase reactions for producing $\text{CH}_2:\text{CHCN}$ (I) and $\text{CH}_2:\text{CHCO}_2\text{H}$ (II) was avoided by diffusing one of the gases through a porous diffuser directly into the catalyst bed and contacting the diffused gas with the other reactant in the bed. Thus, a reactor (shown) was charged with 100 ml. of a K-AgCN-Ca(OH)₂ on low-Fe silica (8-14 mesh) catalyst (U.S. 3,023,226, CA 57, 14948g) and 100 ml. acid-washed 8-14 mesh calcined quartz as a preheater. The catalyst was activated by heating at 400-20° (argon atmospheric). A mixture of argon (11 ml./sec.) and $\text{CH}_2:\text{CHMe}$ (III) (3.5 ml./sec.) was passed through the bed, and NO (2.7 ml./sec.) passed through a porous glass diffuser buried within the bed kept at 425-50°. The conversion of NO into I was 11% at 80% yield, the space time being 7 g./l. catalyst/hr. Several modifications were also described.

=> preheated gas

23047 PREHEATED
1405021 GAS
481598 GASES
1577505 GAS

(GAS OR GASES)

L9 268 PREHEATED GAS
(PREHEATED (W) GAS)

=> 16 and 19

L10 0 L6 AND L9

=> 14 and 19

L11 0 L4 AND L9

=> preheated reactor

23047 PREHEATED
389533 REACTOR
231356 REACTORS
436322 REACTOR

(REACTOR OR REACTORS)

L12 18 PREHEATED REACTOR
(PREHEATED (W) REACTOR)

=> 112 and 14

L13 0 L12 AND L4

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST	ENTRY 35.82	SESSION 36.03
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.46	-1.46

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:45:57 ON 24 JAN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 07:52:41 ON 24 JAN 2005
FILE 'CAPLUS' ENTERED AT 07:52:41 ON 24 JAN 2005
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	35.82	36.03
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.46	-1.46

=> d his

(FILE 'HOME' ENTERED AT 07:35:05 ON 24 JAN 2005)

FILE 'CAPLUS' ENTERED AT 07:35:17 ON 24 JAN 2005

L1 436322 REACTOR
L2 45882 PREHEAT?
L3 3537 L1(L)L2
L4 105288 ACRYLIC ACID
L5 0 L3N AND L4
L6 24 L3 AND L4
L7 566296 NITROGEN
L8 2 L6 AND L7
L9 268 PREHEATED GAS
L10 0 L6 AND L9
L11 0 L4 AND L9
L12 18 PREHEATED REACTOR
L13 0 L12 AND L4

=> d l6 1-14 ti

L6 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI Process for purification of waste gases containing oxygen and combustible components by thermal oxidation

L6 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI Process and apparatus for emulsion polymerization

L6 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI Safe and rapidly practicable cleaning procedure for catalysts and reactor materials used in gas-phase oxidation process in the synthesis of (meth) acrylic acid

L6 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Longitudinal-flow reactor for oxidation reactions consisting of tube bundles designed for heat exchange

L6 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Development of an ultra-rapid reactor for superabsorbent polymer

L6 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Alternating copolymers with good light transmittance and their preparation

L6 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Accelerated preparation of acrylate esters

L6 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Pressure-sensitive emulsion adhesive comprising a polymer system having good tack and peel strengths and enhanced shear strength

L6 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Apparatus and method for producing **acrylic acid**

L6 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Cycloaliphatic acrylate compositions

L6 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Continuous manufacture of acrylic polymer foam-based insulating material

L6 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Catalytic production of acrylic or methacrylic acid

L6 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Oxidation of propylene to acrolein and **acrylic acid**

L6 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Catalytic oxidation of olefins

=> d 16 9 ti fbib abs

L6 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Apparatus and method for producing **acrylic acid**
 AN 1983:471293 CAPLUS
 DN 99:71293
 TI Apparatus and method for producing **acrylic acid**
 IN Dutkay, Ervin
 PA Intreprinderea Chimica, Risnov, Rom.
 SO Rom., 3 pp.
 CODEN: RUXXA3
 DT Patent
 LA Romanian
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	RO 76048	B	19810430	RO 1979-96377	19790125
				RO 1979-96377	A 19790125

AB **Acrylic acid** [79-10-7] is manufactured by continuously passing acrylamide sulfate [18185-97-2] containing 1.5-2.5 mol H₂SO₄ and polymerization inhibitor through a packed column, while water (**preheated** to the reaction temperature) is passed countercurrently through the column,

with the residence time in the column being 0.9-1.5 h, the column temperature being 90-120°, and the column pressure being 0.85-0.97 mm, followed by allowing the reaction mixture to drain into a **reactor** from the column, with residence time in **reactor** being 2-4 h, the **reactor** temperature being 140-160°, and the **reactor**

pressure being 0.85-0.97 mm. This single-step process gives high yields (e.g., 92.8%) and can be automated.

=> d 16 7 ti fbib abs

L6 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Accelerated preparation of acrylate esters
 AN 1990:78163 CAPLUS
 DN 112:78163
 TI Accelerated preparation of acrylate esters
 IN Powanda, Thomas M.; Imes, Robert H.; Collins, George L.
 PA Hoechst Celanese Corp., USA
 SO Eur. Pat. Appl., 7 pp.
 CODEN: EPXXDW
 DT Patent
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 331845	A2	19890913	EP 1988-311335	19881130
	EP 331845	A3	19910605		
	R: BE, DE, FR, GB, IT, NL				
	US 4859792	A	19890822	US 1988-168564	A 19880307
				US 1988-168564	19880307
				US 1986-891991	A1 19860801
	CA 1326684	A1	19940201	CA 1988-584526	19881130
				US 1988-168564	A 19880307
	JP 01299252	A2	19891204	JP 1989-54844	19890307
				US 1988-168564	A 19880307
				US 1988-168565	A 19880307

PATENT FAMILY INFORMATION:

FAN 1990:121088

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 331844	A2	19890913	EP 1988-311320	19881130
	R: BE, DE, FR, GB, IT, NL				
	US 4868329	A	19890919	US 1988-168565	A 19880307
				US 1988-168565	19880307
				US 1986-891990	A1 19860801
	CA 1326683	A1	19940201	CA 1988-584525	19881130
				US 1988-168565	A 19880307
	JP 01299252	A2	19891204	JP 1989-54844	19890307
				US 1988-168564	A 19880307
				US 1988-168565	A 19880307

AB The title esterification of an aliphatic hydroxy compound with **acrylic acid** (I) comprises adding one reactant to a **reactor** and heating from 100° to b.p. of I, adding the other reactant over time during which ≥65% H₂O of reaction is removed, and then heating to completion of the reaction. Thus, 1 mol trimethylolpropane was **preheated** to 135-150° and added over 110 min to 3.3 mol I heated to 120° and H₂O distillate was removed after 50 min, and the reaction continued for 5 h until the acrylate had acid number 0.11, free I content 0.013%, and viscosity 135 cPs. A process for preparation of the above acrylate not using **preheating** required 10 h to complete the reaction.

=> d 16 12-14 ti fbib abs

L6 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Catalytic production of acrylic or methacrylic acid
 AN 1972:46658 CAPLUS
 DN 76:46658
 TI Catalytic production of acrylic or methacrylic acid

PA Societa Italiana Resine S.p.A.
SO Brit., 5 pp.
CODEN: BRXXAA
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	GB 1242464		19710811	IT	19690609

AB **Acrylic acid** (I) [79-10-7] and **methacrylic acid** (II) [79-41-4] were prepared in improved yields by treating poly(oxymethylene) diacetate (III) and poly(oxymethylene) dipropionate (IV), resp., in the presence of an inert gas in the vapor phase with aluminum silicate (V). AcOH and III were introduced at 370-90.deg. to a **reactor** containing V, **preheated** at 300-450.deg. to give 75% yield of I. A mixture of IV and EtCO₂H was introduced at 390.deg. with N to a **reactor** containing V, pretreated with LiOH, to give 90% yield of II.

L6 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI Oxidation of propylene to acrolein and **acrylic acid**
AN 1971:88364 CAPLUS
DN 74:88364
TI Oxidation of propylene to acrolein and **acrylic acid**
IN Eden, Jamal S.
PA Goodrich, B. F., Co.
SO Ger. Offen., 8 pp.
CODEN: GWXXBX

DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	DE 2031618	A	19710121	DE 1970-2031618	19700626
				US 1969-838349	A 19690701
	US 3634502	A	19720111	US 1969-838349	19690701
					A
	NL 7009746	A	19710105	NL 1970-9746	19700701
				US 1969-838349	A 19690701
	GB 1275186	A	19720524	GB 1970-1275186	19700701
				US 1969-838349	A 19690701

AB Acrolein and CH₂:CHCO₂H were prepared by oxidation of propylene with oxy gen in the presence of Mo oxide, TeO₂, and BPO₄ at 375-415°. Thus, 123 g B(OH)₃ was mixed with 85% H₃PO₄ in H₂O, the mixture eva pd., and calcined 16 hr at 400° to give BPO₄, which was mixed with a su suspension of 203.29 g H₂MoO₄ in H₂O and 63.84 g TeO₂. The mixture was evaporated and calcined 16 hr at 400° and 21 hr at 450° to give a catalyst containing Mo oxide 75, TeO₂ 25, and BPO₄ 50 moles. A **reactor** was filled with 80 ml catalyst; steam 3.96, propylene 1, and oxy gen 4.02 moles (all **preheated** at 200-50°) were introduced, and the mixture w as heated 49 sec at 400° to give 49.82% acrolein and 31.80% CH₂:CHC O₂H at 100% propylene conversion.

L6 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
TI Catalytic oxidation of olefins
AN 1970:100057 CAPLUS
DN 72:100057
TI Catalytic oxidation of olefins
IN Trapasso, Louis E.; Wenrick, John D.
PA Goodrich, B. F., Co.
SO U.S., 2 pp.
CODEN: USXXAM

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3497553	A	19700224	US 1966-561043	19660628
				US 1966-561043	A 19660628
AB	<p>Propylene and isobutylene were oxidized in the presence of a catalyst having molar ratios of NiO 0.5-5.0, Cr2O3 0.5-2.0, and TeO2 and Mo2O3 0.5-4.0, and a Ni:Mo mole ratio of 0.1-1.0:1. Thus, Ni(NO3)2.6H2O 218.1, Cr(NO3)3.9H2O 150.1, and (NH4)6Mo7O24.4H2O 330 g were dissolved in 150, 100, and 440 ml distilled H2O, resp. The molybdate solution was added slowly to</p> <p>a mixture of the Ni and Cr solns., and 29.9 g powdered TeO2 was added. The paste obtained was dried at 100° in vacuo, baked for 16 hr at 400°, and ground to give a catalyst with a 2:1:0.5-5.0 Ni:Cr:Te:Mo atomic ratio. A supported catalyst was prepared by adding 375 g aqueous colloidal dispersion of microspheroidal silica containing 30-5% SiO2 (Ludox H.S). Propylene was oxidized in a fluidized-bed reactor containing 60 ml catalyst. Steam (0.127 mole/hr H2O) at 200-50° was passed into the reactor, and 0.0795 mole/hr O and 0.0317 mole/hr propylene were added, preheated to 200-50°, and passed into the reactor (Ni-Cr-Te-Mo-Si atomic ratio, temperature, % propylene conversion, % yield acrolein, and % yield acrylic acid given):</p> <p>1:1:1:4:2.5, 425°, 94.9, 61.48, 22.97: 1:1:2:4:2.5, 430°, 66.47, 83.24, 10.41; 4:2:1:5:0, 385°, 83.72, 35.51, 33.31; 4:1:1:6:0, 395°, 89.76, 39.85, 34.89. The contact time was 18 sec.</p>				

=> d his

(FILE 'HOME' ENTERED AT 07:35:05 ON 24 JAN 2005)

FILE 'CAPLUS' ENTERED AT 07:35:17 ON 24 JAN 2005

```

L1      436322 REACTOR
L2      45882 PREHEAT?
L3      3537 L1(L)L2
L4      105288 ACRYLIC ACID
L5      0 L3N AND L4
L6      24 L3 AND L4
L7      566296 NITROGEN
L8      2 L6 AND L7
L9      268 PREHEATED GAS
L10     0 L6 AND L9
L11     0 L4 AND L9
L12     18 PREHEATED REACTOR
L13     0 L12 AND L4

```

=> \gas

```

      1405021 GAS
      481598 GASES
L14    1577505 \GAS
          (GAS OR GASES)

```

=> gas

```

      1405021 GAS
      481598 GASES
L15    1577505 GAS
          (GAS OR GASES)

```

=> l3(l)l15

```

L16    1949 L3(L)L15

```

=> /2(l)l3

MISSING TERM FOR FIELD QUALIFICATION BEFORE '/2'

The search profile entered contains a field qualifier, e.g., '/AU', with no term preceding it.

=> l2(l)l3
L17 3537 L2(L)L3

=> l2(l15)
MISSING OPERATOR 'L2(L15'
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> l2(l)l15
L18 15113 L2(L)L15

=> l17 and l18
L19 1953 L17 AND L18

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	76.48	76.69
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-5.11	-5.11

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:09:36 ON 24 JAN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:38:57 ON 24 JAN 2005
FILE 'CAPLUS' ENTERED AT 08:38:57 ON 24 JAN 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	76.48	76.69
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-5.11	-5.11

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	76.48	76.69
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-5.11	-5.11

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:39:05 ON 24 JAN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 09:11:34 ON 24 JAN 2005
FILE 'CAPLUS' ENTERED AT 09:11:34 ON 24 JAN 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	76.48	76.69
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.11	-5.11

=> d his

(FILE 'HOME' ENTERED AT 07:35:05 ON 24 JAN 2005)

FILE 'CAPLUS' ENTERED AT 07:35:17 ON 24 JAN 2005

L1 436322 REACTOR
L2 45882 PREHEAT?
L3 3537 L1(L)L2
L4 105288 ACRYLIC ACID
L5 0 L3N AND L4
L6 24 L3 AND L4
L7 566296 NITROGEN
L8 2 L6 AND L7
L9 268 PREHEATED GAS
L10 0 L6 AND L9
L11 0 L4 AND L9
L12 18 PREHEATED REACTOR
L13 0 L12 AND L4
L14 1577505 \GAS
L15 1577505 GAS
L16 1949 L3(L)L15
L17 3537 L2(L)L3
L18 15113 L2(L)L15
L19 1953 L17 AND L18

=> startup

5235 STARTUP
129 STARTUPS
L20 5314 STARTUP
(STARTUP OR STARTUPS)

=> l1(l)l20

L21 1467 L1(L)L20

=> l2(l)l21

L22 23 L2(L)L21

=> d l22 10-23 ti

L22 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
TI Process for starting up coal gasification reactors

L22 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
TI Design construction and operation of a full scale downflow fixed film reactor using hogwaste substrate

L22 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Plasma engineering analysis of the Tennessee tokamak

L22 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Plasma engineering studies for Tennessee Tokamak (TENTOK) fusion power reactor

L22 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Design of a reactor system for the synthesis of titanium diboride

L22 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Sodium fill of FFTF

L22 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Methanization reactor

L22 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Kinetic study of the catalytic decomposition of liquid hydrazine. Effect of the initial temperatures of the catalytic bed and hydrazine for different ignition pressures

L22 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Wet air oxidation system for strong sludges and liquors

L22 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Analysis of filling accidents in Molten Salt Reactor Experiment

L22 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Release of fission products from reactor fuels during transient accidents simulated in TREAT

L22 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Operating problems in the production of petroleum naphthalenes from catalytic gas oil

L22 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Fungicidal tribasic copper chloride

L22 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI The disposal of radioactive waste

=> 14 and 122

L23 0 L4 AND L22

=> d 122 10 ti fbib abs

L22 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Process for starting up coal gasification reactors
 AN 1991:210473 CAPLUS
 DN 114:210473
 TI Process for starting up coal gasification reactors
 IN Duerlich, Manfred; Enders, Heinz; Wehner, Olaf; Findeisen, Hartmut; Thieme, Gerd; Toufar, Walter; Scholz, Guenter; Sowka, Karl; Graf, Hermann; et al.
 PA VEB Gaskombinat Schwarze Pumpe, Germany
 SO Ger. Offen., 5 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 4013739	A1	19910131	DE 1990-4013739	19900428

			DD 1989-331077	A	19890724
DD 285989	A5	19910110	DD 1989-331077		19890724
DD 285989	B5	19940414			
CZ 280247	B6	19951213	CZ 1990-3597		19900719
			DD 1989-331077	A	19890724
CN 1049024	A	19910206	CN 1990-104821		19900724
			DD 1989-331077	A	19890724

AB The coal gasification **reactor** start-up fuel mixture composition is varied during **startup** to steadily increase **reactor** temperature without forming an explosive mixture. The mixture may be **preheated** or heated using steam. Inert gases, e.g., N₂ or CO₂, are used to increase temperature and prevent problems.

=> d 122 1-9 ti

L22 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Liquid water and air injection for improved management of an autothermal reformer

L22 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Fuel cell power plant and its startup method

L22 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Steady-State and Dynamic Effects of Design Alternatives in Heat-Exchanger/Furnace/Reactor Processes

L22 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Radially corrugated catalyst unit with rotatable start-up burner

L22 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Control of an autothermal network of nonstationary catalytic reactors

L22 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Development of an advanced startup procedure for a PIUS-type reactor

L22 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Catalytic air purifiers

L22 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI The simulation test to start up the PIUS-type reactor from isothermal fluid condition

L22 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Limiting cases and approximate solutions for fixed-bed reactors with periodic flow reversal

=> d 122 6 ti fbib abs

L22 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Development of an advanced startup procedure for a PIUS-type reactor
 AN 1998:643318 CAPLUS
 DN 129:322394
 TI Development of an advanced startup procedure for a PIUS-type reactor
 AU Ito, Takahiro; Oyamatsu, Kazuhiro; Tsuji, Yoshiyuki; Tamaki, Masayoshi; Kukita, Yutaka
 CS Dep. Nuclear Eng., Nagoya Univ., Nagoya, 464-8603, Japan
 SO Journal of Nuclear Science and Technology (1998), 35(8), 554-563
 CODEN: JNSTAX; ISSN: 0022-3131
 PB Atomic Energy Society of Japan
 DT Journal
 LA English
 AB An advanced **startup** procedure for the PIUS-type **reactor** has been developed. The procedure is related to the way to isolate the

primary loops from the borated **reactor** pool by establishing stable hot/cold water interfaces in the so-called d. lock sections. The procedure starts with accumulating **preheated** water in the high points of the steam-generator-side legs. Then, by restarting the **reactor** coolant pumps, the primary loops can be isolated from the pool as the primary loops reaches a uniformly higher temperature than the pool water. The addnl. components required for this procedure are only a low-pressure grade heater and a pump of small capacities. Since the isolation is achieved with the d. locks left open, the core shutdown and cooling capabilities by means of the natural circulation of borated water are maintained in case of any abnormal events during **startup**.

The feasibility and the predictability of this procedure were investigated by running an experiment in a scaled single-loop facility and conducting an anal. using a 1-dimensional model. Both in the experiment and in the anal., the primary loop was successfully isolated from the pool.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	94.18	94.39
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-6.57	-6.57

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STN INTERNATIONAL SESSION SUSPENDED AT 09:15:41 ON 24 JAN 2005

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Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 09:39:38 ON 24 JAN 2005
FILE 'CAPLUS' ENTERED AT 09:39:38 ON 24 JAN 2005
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	94.18	94.39
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-6.57	-6.57

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	94.18	94.39
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-6.57	-6.57

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:39:50 ON 24 JAN 2005

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	146587	preheat\$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L2	15944	shell near3 tube	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L3	1771	L1 and L2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L4	472	L1 same L2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L5	12	"1089353"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L6	550	562/598.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L7	0	L6 and L4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L8	1	L6 and L3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L9	359007	reactor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L10	12311	L1 same L9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L11	4	L6 and L10	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L12	0	("6504055").URPN.	USPAT	OR	ON	2005/01/24 13:01
L13	0	("6651731").URPN.	USPAT	OR	ON	2005/01/24 13:01
L14	1	"3118927".pn.	USPAT	OR	ON	2005/01/24 13:01

L15	2	("3118927").URPN.	USPAT	OR	ON	2005/01/24 13:01
L16	4	"3634502".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L17	2	"6676808".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L18	1	"4061545".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L19	1	"4260821".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L20	1	"4341600".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L21	1	"4365081".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L22	1	"4365081".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L23	1	"4369097".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L24	1	"4986884".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L25	1	"6348135".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L26	1	"6348135".PN.	USPAT; USOCR	OR	ON	2005/01/24 13:01
L27	3	"3762465".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L28	2	"6046343".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L29	38395	startup	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L30	1133	L9 same L29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
L31	87	L1 same L30	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01

L32	0	L6 and L31	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/01/24 13:01
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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	146587	preheat\$	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
2	BRS	L2	15944	shell near3 tube	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
3	BRS	L3	1771	L1 and L2	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
4	BRS	L6	550	562/598.ccls.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
5	BRS	L7	0	L6 and L4	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
6	BRS	L9	359007	reactor	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	

7	BRS	L10	12311	L1 same L9	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
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	Error Definition	Errors
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9	BRS	L13	0	("6651731").URPN.	USPAT	2005/01/24 13:01	
10	BRS	L29	38395	startup	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
11	BRS	L30	1133	L9 same L29	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
12	BRS	L32	0	L6 and L31	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
13	BRS	L8	1	L6 and L3	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
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16	BRS	L19	1	"4260821".PN.	USPAT; USOCR	2005/01/24 13:01	
17	BRS	L20	1	"4341600".PN.	USPAT; USOCR	2005/01/24 13:01	
18	BRS	L21	1	"4365081".PN.	USPAT; USOCR	2005/01/24 13:01	

19	BRS	L22	1	"4365081".PN.	USPAT; USOCR	2005/01/24 13:01	
20	BRS	L23	1	"4369097".PN.	USPAT; USOCR	2005/01/24 13:01	

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
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22	BRS	L25	1	"6348135".PN.	USPAT; USOCR	2005/01/24 13:01	
23	BRS	L26	1	"6348135".PN.	USPAT; USOCR	2005/01/24 13:01	
24	BRS	L5	12	"1089353"	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
25	BRS	L11	4	L6 and L10	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
26	BRS	L15	2	("3118927").URPN.	USPAT	2005/01/24 13:01	
27	BRS	L16	4	"3634502".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
28	BRS	L17	2	"6676808".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
29	BRS	L27	3	"3762465".pn.	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	

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31	BRS	L31	87	L1 same L30	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	
32	BRS	L4	472	L1 same L2	US- PGPUB; USPAT; EPO; JPO; DERWEN T	2005/01/24 13:01	

	Error Definition	Errors
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31		
32		